



Small Projects Day, Section 1: Project Proposal

1. **Responsible Official:** John Sinclair, Forest Supervisor
2. **Project Name:** White Pine/Oak/Hickory Timber Stand Improvement
3. **Project Location:** Addison County – Towns of Leicester and Ripton, Bennington County – Towns of Peru and Winhall
4. **Project Contact:** Allan Braun, allan.braun@usda.gov, 802-362-2307 ext. 7213
5. **Purpose and Need** (*Why here? Why now? Why is the outcome desired?*): White pine is increasingly experiencing negative effects to growth from various fungal diseases that affect needles and boles. Increased light and air movement on the crowns and boles of the trees would change micro-conditions to reduce fungal impacts. The best time to do these interventions is a short window when trees are taller than 25' (trees shorter than this are vulnerable to tip weevil) but before competition results in decreasing live crown ratios and the tree is unable to respond fully. Oak and hickory may also be released from competition. Oak requires large amounts of light to persist, but grows more slowly than other hardwood tree species, and requires periodic disturbance to reduce competition. White pine and oak are both native species that contribute to forest diversity and resiliency and provide valuable forest products.
6. **Project Description** (*What will we be doing? How will we do it? Where is the project located?*): The proposed stands have had a regeneration harvest in the last 35 years and have a white pine component (typically planted) and/or oak-hickory component (typically natural regeneration). Up to 100 trees/acre would be selected for release. Tree vigor and form would determine which trees are selected. Competing trees would be felled in a radius equal to half the tree height, 20 to 25 feet in most cases. Tree felling would be accomplished with chainsaws, and felled trees would be left on the ground. Felled trees would generally be less than 10 inches Diameter at Breast Height (DBH) in size, and average tree size would be 4 to 5 inches DBH. A total of 54 acres is proposed for treatment.

Stands include:
 - Middlebury Ranger District – C41 S11 (11 acres, oak) and C88 S4 (20 acres, oak and hickory)
 - Manchester Range District- C55 S7 (3 acres, white pine), C66 S39 (8 acres, oak), C132 S16 (6 acres, white pine) & S18 (6 acres, white pine)
7. **Forest Plan Management Area:** Diverse Forest Use (all stands except C88 S4) and Green Mountain Escarpment (C88 S4 only)
8. **Forest Plan Compliance** (*How does this project comply with the Land & Resource Management Plan (Forest Plan) direction?*): This project fits in with Intermediate Cut guidelines on pg. 24 of the Forest Plan:



G-1: Release desirable species or individual trees to:

- Increase the proportion of softwoods to improve deer wintering areas
- Enhance the survival of oak stands on all sites where they occur to allow for continued presence and to maintain vegetative diversity
- Improve tree crop growth and vigor

G-2: When compatible with site productivity and overall resource objectives, use intermediate cuts to improve the existing stand quality and regulate its growth.

It fits within the Green Mountain Escarpment guidelines on pg. 87:

G-1: Emphasis in this management area should be to perpetuate natural communities including: mesic red oak-northern hardwood forests, dry oak-hickory-hophornbeam forest, mesic maple-ash-hickory-oak forest, red pine forest and woodland, dry oak forest and woodland, pitch pine-oak-heath rocky summit, and temperate cliffs, outcrops, and talus.

G-2: Silvicultural prescriptions should be designed to maintain and enhance the natural community diversity in the area. In particular, prescriptions should be designed to enhance regeneration of pine and oak-dominated communities.

9. Exclusion Category: 36 CFR 220.6(e)(6)

10. Expected Implementation Date: 8/2020

